

# RECLAMATION

*Managing Water in the West*

**Funding Opportunity Announcement (FOA) No. R10AF20010**

## **Upper Klamath Basin Fish Screen Program**

**Fiscal Year 2010**



**U.S. Department of the Interior  
Bureau of Reclamation  
Mid-Pacific Region**  
<http://www.usbr.gov/mp/>

**June 2010**

## Upper Klamath Basin Fish Screen Program

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Department of the Interior  
Bureau of Reclamation  
Mid Pacific Region  
2800 Cottage Way  
Sacramento, CA 95825

## OVERVIEW

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Federal Agency Name:	DOI, Bureau of Reclamation, Sacramento, CA
Funding Opportunity Title:	Upper Klamath Basin Fish Screen Program
Announcement Type:	Initial announcement
Funding Opportunity Number:	R10AF20010
Catalog of Federal Domestic Assistance (CFDA) Number:	15.517
Application Due Date:	Applications due <i>July 19, 2010</i> , 3:00 p.m. PST
Eligible Applicants:	As described in Section III.A
Applicant Cost Share:	50% of project costs
Federal Funding Amount:	Up to \$50,000 per agreement or more on a case-by-case basis if proposal/s clearly demonstrate significant benefit to the Klamath Project overall
Estimated number of agreements to be awarded:	1-10
Total amount of funding available for award:	Estimated at up to \$100,000

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## TABLE OF CONTENTS

Section I	Background and Program Objectives	6-9
Section II	Award Information	10
Section III	Eligibility Information	11-12
Section IV	Application and Submission Information	12-18
Section V	Application Format	19-30
Section VI	Evaluation Criteria	31-34
Section VII	Award Administration Criteria	34-35
Section VIII	Agency Contacts	35
Section IX	General and Special Provisions	35-36
Attachment A	Recommended Interim Fish Screen Criteria Letter	
Attachment B	Inventories of diversions in Upper Klamath Lake	
Attachment C	Klamath Project Service Water Diversions – Maps (5)	

## PROPOSAL CHECKLIST

The following table contains a summary of the information that you are required to submit.

ORIGINAL HARD COPY AND DISK OF PROPOSAL DOCUMENTS		
What to Submit	Required Content	REQUIRED FORM OR FORMAT
<b>APPLICATION CONTENT:</b>	Sec IV.C.2	
Cover Page	Sec IV.C.2.1	Office of Management and Budget (OMB), Standard Form (SF) 424*, Application for Federal Assistance.
Assurances	Sec. IV.C.2.2	Office of Management and Budget (OMB), SF 424B* or SF 424D*, as applicable.
Title Page	Sec. IV.C.2.3	Provide a brief, informative and descriptive title for the proposed work that indicates the nature of the project. Include the name and address of the applicant, and the name and address, email address, telephone and facsimile numbers of the project manager.
Table of Contents	Sec. IV.C.2.4	List all major sections of the technical proposal.
Executive Summary:	Sec. IV.C.2.5	See format in Section V
General Project Information	Sec. IV.C.2.5.1	Include the project name, applicants name and address, contact information and a summary of funding requested. Also include a one-paragraph project overview.
Summary of Project Criteria	Sec. IV.C.2.5.2	Include a brief narrative of the project. Discuss project benefits and the project financing and cost sharing.
Technical Proposal:	Sec. IV.C.2.6	See format in Section V
Background Data	Sec. IV.C.2.6.1	Location, information and other relevant data to the proposed project/activity.
Consistency with State or Local Water Plan	Sec. IV.B.2.6.2	Applicants are required to ensure that the proposed project is consistent with any existing local (i.e. county, municipal or regional) water plan.
Scope of Work/Project Description	Sec. IV.C.2.6.3	Explain how the project and performance will be measured to evaluate the meeting, and/or achievement of, specific milestones or objectives.
Performance Measures Plan	Sec. IV.C.2.6.4	Include a performance assessment plan and list of project-specific performance measures.
Environmental and Regulatory Compliance	Sec. IV.C.2.6.5	Applicants are required to comply with all applicable state, Federal, and local environmental, cultural, and paleontological resource protection laws and regulations.
Funding Plan	Sec IV.D.	Describe how non Reclamation share of project costs will be obtained.

Funding Opportunity Announcement R10AF20010  
Upper Klamath Basin Fish Screen Program

<b>BUDGET PROPOSAL:</b>	Sec. IV.E	
Budget Proposal Format	Sec. IV.E.2 through IV.C.2.10	See Sample Budget Format in Section V.
Budget Narrative	Sec. IV.E.2.1 thru IV.E.2.10	Describe how each budget item relates to the project activity and provide clear rationale/breakdown for the amount of each budget item. Award will not be made to any applicant who fails to provide narrative information.
Budget Information	Sec. IV.E.2.12	Office of Management and Budget (OMB SF 424A* Budget Information (Non-Construction Programs) or 424C* (Construction Programs), as applicable.
*Forms may be downloaded from <a href="http://www.grants.gov">www.grants.gov</a> under the Funding Opportunity, R10AF20010, Full Announcement or Application or <a href="http://www.usbr.gov/mp/watershare/documents/bids/index.html">http://www.usbr.gov/mp/watershare/documents/bids/index.html</a>		

## SECTION I --

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### I.A.1 BACKGROUND

The Lost River sucker (*Deltistes luxatus*) and shortnose sucker (*Chasmistes brevirostris*) are native to Upper Klamath Basin waters, including Upper Klamath Lake (UKL), Keno Reservoir, Lost River, Clear Lake, and Gerber Reservoir. These sucker species were listed as endangered under the Federal Endangered Species Act (ESA) in 1988. Larval and juvenile suckers show considerable movement and are vulnerable to being entrained (i.e. permanently lost from the population) into unscreened diversions at a time when swimming ability to escape diversion attraction flows is not well developed.

Bureau of Reclamation's Klamath Basin Area Office (KBAO) is required to implement measures to reduce entrainment of ESA-listed Lost River and shortnose suckers at Klamath Project (Project) facilities, pursuant to the U.S. Fish and Wildlife Service's (FWS) 2008-2018 ESA Biological Opinion (BO) on Project operations. KBAO has taken a number of actions to minimize take resulting from entrainment by constructing structural fish screens on Federal owned Project diversions at A-Canal and Clear Lake. More recently, Reclamation implemented a Fish Screen Program in UKL to screen a privately owned, non-Project diversion at Geary Canal in Howard Bay. KBAO UKL Fish Screen Program, currently administered by Oregon Department of Fish and Wildlife (ODFW), was initiated in 2007.

Reclamation has determined that the fish screen program should be more inclusive and encompass potentially screening private, non-Federal owned diversions in the state of Oregon; private diversions in California are excluded from this program at this time. Eligible diversions include (1) those located in UKL which are outside the Project service area and (2) those located within the Project service area which encompasses Lake Ewauna/Keno Reservoir and the Lost River watershed from the Oregon/California border upstream to Gerber Reservoir and Malone Reservoir in Oregon. Reclamation proposes to implement the Upper Klamath Basin Fish Screen Program (UKBFSP) in Oregon to achieve broader benefits for ESA-listed suckers likely to be entrained at private diversions both on and off the Project. The UKBFSP will provide diversion owners with 90 percent of the cost of constructing a fish screen to create an incentive to participate in the program. Reclamation intends to carry out the UKBFSP using its delegated authority under the Fish and Wildlife Coordination Act, Section 16 U.S.C §661 et seq., 255 DM 14.

### I.A.2 PURPOSE

Reclamation KBAO is implementing a program to screen private non-Project diversions on UKL, and privately owned diversions on Keno Impoundment and the Oregon portion of the Lost River system. The Program's overall purpose is it to meet Reclamation's ESA entrainment reduction requirements contained in the 2008-2018 BO on Project operations and to do so in the most cost effective and efficient manner possible. Reclamation in carrying out this UKBFSP must assure that any new screens ultimately designed and constructed satisfies *Recommended Interim Fish Screen Criteria for the Upper Klamath Basin*, adopted by FWS, ODFW, and California Department of Fish and Game (CDFG) in July 2005 (**Attachment A**).

Reclamation is requesting proposals to administer and implement the UKBFSP on-the-ground. To be eligible for financial assistance, an applicant must show they have successfully designed and constructed fish screens on diversions in the Upper Klamath Basin in Oregon, and have successfully administered a fish screen program working with multiple landowners and interest

groups. This UKBFSP will be implemented in close coordination with Reclamation's Klamath Fish Passage Technical Committee (KFPTC), FWS, Klamath Watershed Partnership (KWP), and private landowners who agree to participate in this program.

### **I.A.3 PROGRAM OBJECTIVE**

The objective of the UKBFSP is to: (1) help eliminate one of the anthropogenic factors limiting the recovery of endangered shortnose and Lost River suckers; and (2) demonstrate that expenditures of public monies for screening are invested where the ESA-listed fish species are at risk of entrainment.

At the end of the performance period, Reclamation will evaluate (1) the success of the program in terms of projects being implemented on the ground; and (2) the demonstrated success in securing agreements to construct fish screens on private diversions in UKL, Keno Impoundment, and the Lost River system in Oregon. The successful recipient will be required to demonstrate success in achieving the goals of this program, and must respond to the performance measures listed in Section I.C.

### **I.A.4 OBJECTIVE OF FUNDING OPPORTUNITY ANNOUNCEMENT**

This FOA invites recipients to cost share on projects to design and construct state-of-the-art fish screens on privately-owned diversions in UKL, Keno Impoundment, and Lost River system in Oregon. Each fish screen project must be designed to satisfy State and Federal criteria for protecting ESA-listed suckers before they are constructed on the ground.

**I.A.4.1 Evaluation Criteria.** See *Section VI*.

### **I.B TECHNICAL REQUIREMENTS**

Reclamation has developed inventories of diversions in UKL (**Attachment B**), as well as diversions in the Keno Impoundment and Lost River system (**Attachment C**). Reclamation has initially determined there are approximately 25-30 private diversions on UKL, ranging in size from somewhat large gravity diversions (i.e. 60 cfs) to very small pump diversions (i.e. less than 5 cfs). Similarly, Reclamation estimates that there are many small capacity unscreened private diversions distributed throughout the Keno Impoundment and Lost River watershed in Oregon.

**I.B.1** Under the UKBFSP, recipients are required to adhere to several technical requirements listed below.

**I.B.1.1** Provide at least a 50 percent cost share to leverage against funding in this FOA.

**I.B.1.2** Conduct on-the-ground evaluations of a proposed diversion site to determine that ESA-listed suckers are at risk of entrainment before design and construction of a fish screen occurs. This evaluation shall be limited to only diversions which are greater than 5 cfs in capacity. There are many small pump diversions in the Keno Impoundment and Oregon portion of the Lost River system for which on-the-ground entrainment evaluations are not needed before binding agreements with landowners are executed and construction of a fish screen can occur. The recipient shall develop and be responsible for implementing required entrainment evaluation plans and receive approval from Reclamation and the KFPTC before field activities begin. Entrainment evaluation information collected by the recipient at diversions greater than 5 cfs shall be reviewed by Reclamation and the KFPTC in order to help prioritize future decisions

regarding which private diversions provides biological value relative to the cost of a fish screen which meets State and Federal criteria. Reclamation has determined that screening private diversions within the Project service area will be given greater weight when prioritizing future screen locations based upon on-the-ground entrainment evaluation data collected by the recipient.

**I.B.1.3** Ensure that 90 percent of Federal and recipient matching funds to design and construct a fish screen project is provided to each willing landowner who agrees to participate in the program;

**I.B.1.4** Require willing participants in the program to contribute a 10 percent cost share match to construct a fish screen;

**I.B.1.5** Verify and/or ground truth Reclamation inventories of private diversions to help prioritize sites for future screening. Reclamation has compiled inventory lists/information which will be provided to the recipient. Recipient shall work with Reclamation to verify the following inventory information: geographic location (GPS coordinates), diversion capacity, hydraulic site characteristics, geographic site features/characteristics, geological site conditions, and ownership information;

**I.B.1.6** Develop and implement a public outreach program to actively solicit landowner participation by working cooperatively with the KBAO, FWS Klamath Field Office, and KWP where appropriate;

**I.B.1.7** Develop and execute legal agreements with individual landowners to allow projects to be implemented on the ground;

**I.B.1.8** Complete preliminary and final designs plans for fish screen projects, which shall include conducting or arranging to conduct geologic surveys and hydraulic modeling as may be necessary;

**I.B.1.9** Develop, execute, administer and manage contracts leading to the construction of fish screen facilities on private diversions in UKL, Keno Impoundment, and Lost River system in Oregon;

**I.B.1.10** Keep Reclamation apprised of progress and engaged in the review and approval of preliminary and final engineering design plans for all fish screen facilities funded under this program. Reclamation's KFPTC shall also participate in this engineering design review process;

**I.B.1.11** Ensure an active database is maintained and provide the opportunity for Reclamation to be continually engaged in the review and approval of engineering design plans for all fish screen facilities funded under the agreement;

**I.B.1.12** Provide Reclamation with semi-annual reports describing progress on developing screening partnerships with private landowners, implementation accomplishments, issues needing resolution, and an accounting of Federal funds dispersed;

**I.B.1.13** Provide Reclamation with a copy of each agreement developed and executed with individual landowners participating in this cooperative program.



**I.B.2 Bureau of Reclamation shall:**

**I.B.2.1** Have substantial involvement in this project, therefore, the award instrument will be a cooperative agreement.

**I.B.2.2** Participate in public outreach activities with ODFW, FWS, and KWP to solicit public participation in this cooperative UKBFSP;

**I.B.2.3** Assist in the development of the diversion inventories which is described in I.B.1.5.; and

**I.B.2.4** Provide technical assistance, as needed, in the planning and design of fish screens on UKL, Keno Impoundment, and Lost River system in Oregon.

**I.C. PERFORMANCE MEASURES**

It is critical to demonstrate that progress is being made to design and implement fish screens on the ground. Reclamation has determined that the following measures of performance must be shown during the duration of this program:

**I.C.1** Hold at least two meetings with the KWP and Reclamation to announce the cooperative funding program is available and to solicit interest in developing binding agreements to (1) permit entrainment evaluation activities to commence at a particular private diversion starting in summer 2011, and (2) to design and construct a fish screen structure following a Reclamation decision to proceed with a fish screen structure at a particular diversion site. Such meetings shall occur by May 1, 2011.

**I.C.2** Generate at least two binding agreements with willing landowners. Such agreements will allow (1) on-the-ground evaluations at a proposed diversion site to determine that ESA-listed suckers are at risk of entrainment, and/or (2) a fish screen to be constructed on the ground. Such agreements between recipient and landowner shall be developed no later than December 31, 2011.

**I.C.3** Generate at least two engineering design drawings of fish screen facilities at prioritized diversion sites by June 30, 2012.

**I.C.4** Construct at least two fish screen projects by December 31, 2012.

**I.D. PROGRAM AUTHORITY**

This Funding Opportunity Announcement is issued in accordance with the authority of Fish and Wildlife Coordination Act, U.S.C. (16 U.S.C. 661 et seq), as amended. Applicants are advised to verify their proposed project meet the requirements of this public law and the appropriate subsection. Reclamation reserves the right to reject project applications that do not meet the requirements of the authority.

**I.E. PERIOD OF PERFORMANCE**

The period of performance is the date of execution (award) through December 31, 2015, with this period being subject to extension based upon the information obtained in the above tasks, and in accordance with any applicable laws and regulations.

## **SECTION II -- AWARD INFORMATION**

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### **II.A. TOTAL PROJECT FUNDING**

Approximately 1-10 agreements will be awarded, depending on the total amount of funding requested by successful applications and which submittals are deemed in the evaluation process to be complete and in the best interest of the Project. Estimated funding for fiscal year 2010 is \$100,000.

### **II.B. PROJECT FUNDING LIMITATIONS**

To facilitate the broad and effective use of limited Federal funds, Reclamation's share of any one proposed financial assistance agreement shall generally not exceed 50% of the total project costs, and shall generally not exceed \$50,000 unless the proposal benefits more than one district within the Project. However, Reclamation retains the right to make awards exceeding that amount on a case-by-case basis.

### **II.C. RECLAMATION RESPONSIBILITIES**

If substantial involvement between Reclamation and the Recipient is anticipated during the performance of this project, the anticipated instrument will be a cooperative agreement. In support of this agreement, Reclamation will provide the following:

Reclamation shall collaborate and participate with the Recipient in the management of the project and closely oversee the Recipient's activities to ensure that the program objectives are being achieved. This oversight shall include review, input and approval at key interim stages of the project as identified in the Recipient's proposal.

If substantial involvement is not anticipated on the part of Reclamation, the financial assistance instrument will be a grant.

Reclamation retains the rights to make awards using either grant or cooperative agreement instruments.

**The application must demonstrate a public benefit for financial assistance agreements.**

**Reclamation reserves the right to award continuation funding for projects previously awarded. However, applicants should specify if this current application is supplementary to a previous award, the status of the previous award (include the end date or anticipated complete date and outstanding issues) and how the current phase is dependant on the previously awarded phase.**

### **II.D. AWARD DATE**

It is anticipated that awards will be made on or before *August 31, 2010* with an anticipated project start date on or before *September 30, 2010*.

## SECTION III -- ELIGIBILITY INFORMATION

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### III.A. ELIGIBLE APPLICANTS

Applicants must be local public (i.e. cities, counties, or State) agencies involved and experienced with installing fish screen facilities. Agencies may wish to enter into recipient-subrecipient relationships. Applicants with past performance and history of fish screen programs/projects will be given preference.

### III.B. COST SHARE REQUIREMENT

Reclamation has Federal funds in the amount of \$100,000.00 available to expend on this program. Reclamation will require the recipient to provide an additional cost-share match of at least 50% (i.e. \$50,000.00) of the Federal contribution to on-the-ground project implementation. This leveraging (either cash contribution or in-kind services) will allow Reclamation to accomplish the project in a potentially shorter timeframe and at a lower overall cost to the Federal Government.

If cost sharing would be provided, the recipient's proposal shall include a funding plan that describes how the non-Reclamation share of the costs will be obtained. Reclamation will make a determination of financial capability based on the funding plan submitted.

Cost sharing may be made through cash or in-kind contributions from the applicant, or third party partners; however, all cost share contributions must meet the criteria established in the OMB administrative and cost principles circulars applicable to the applicant (see Section IX). In-kind contributions constitute the value of non-cash contributions that benefit a federally assisted project. These contributions may be in the form of real property, equipment, supplies and other expendable property, and the value of goods and services directly benefiting and specifically identifiable to the project or program. The cost or value of in-kind contributions that have been or will be relied on to satisfy a cost sharing or matching requirement for another Federal financial assistance agreement, a Federal procurement contract, or any other award of Federal funds, may not be relied on to satisfy the cost share requirement for UKL Fish Screen proposals.

Indirect costs incurred during the development or construction of a project, which will not be recovered may be included as part of your cost-share. Indirect costs are those: (a) incurred for a common or joint purpose benefiting more than one cost objective, and (b) not readily assignable to any one cost objective. For further information on indirect costs, refer to the OMB cost principles circular applicable to your organization as listed in Section IX of this document.

### Pre-Award Costs

Project costs that have been incurred prior to the date of award but after the date of authorization and appropriation for the Initiative ("pre-award costs") may be submitted for consideration as an allowable portion of the recipient's cost share for the project. Such costs may include, for example, design or construction plans and environmental compliance costs directly supporting the proposed project. Reclamation will review the proposed pre-award costs to determine if they are allowable in accordance with the authorizing legislation and applicable cost principles.

### III.C. OTHER REQUIREMENTS

#### III.C.1 TECHNICAL AND BUDGET PROPOSALS

The applicant must submit complete technical and budget proposals in accordance with the requirements stated in *Section IV* of this document.

#### III.C.2 FUNDING PLAN

The applicant's proposal shall include a funding plan that describes how the non-Reclamation share of the costs will be obtained. If funding will be provided by other than the applicant, the names of these additional sources must be provided. Reclamation will use this information in making a determination of financial capability. See *Section IV.D* for information on submission of the Funding Plan.

#### III.C.3 OTHER REGULATIONS

Applicants shall adhere to Federal, State, and local laws, regulations, and codes, as applicable, and shall obtain all required approvals and permits. Applicants shall also coordinate and obtain approvals from site owners and operators. See *Section IV.C.2.6.5* for additional information regarding environmental and regulatory compliance.

## SECTION IV -- APPLICATION SUBMISSION INFORMATION

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### IV.A. ADDRESS TO REQUEST APPLICATION PACKAGE

This document contains all information, forms, and electronic addresses required to obtain the information required for submission of an application. Hard copies of the FOA will not be mailed.

If you are unable to access this information electronically and need assistance, please contact by:

Phone: (916) 978-5149 (Mary Sims)

E-mail: [msims@usbr.gov](mailto:msims@usbr.gov)

### IV.B. INSTRUCTIONS FOR SUBMISSION OF PROJECT PROPOSAL

Each applicant shall submit a proposal in accordance with the instructions contained in this section. **Do not include** a cover letter or company literature/brochure with your proposal. All pertinent information must be included in your Technical and Activity Budget Proposals in accordance with the formats described in this section.

Applications must be submitted as a complete package. Materials arriving separately will not be included in the application package for consideration and will result in the application being rejected or not funded. Electronic filings of applications are acceptable via Grants.gov. If submitting your application through grants.gov, please allow at least three (3) working days for processing.

## IV.C. APPLICATION INSTRUCTIONS

### IV.C.1 APPLICATION FORMAT AND LENGTH

Technical proposals shall be limited to **five (5)** 8-1/2 inch X 11 inch pages **single-spaced** on one side of the page. The font used shall be at least 12 points in size and shall be easily readable. Proposals will be prescreened for compliance to the 5-page limit. The cover sheet (Standard Form 424), Assurances (Standard Form 424B or D, as applicable), Budget (Standard Form 424A or C), blank pages, title pages, blueprints, Appendix, and table of content pages, will not be counted in the 5-page limit. All pages shall be consecutively numbered, including pages with tables and exhibits.

**The proposal format is included in Section V of this document. Incomplete submittals may be considered nonresponsive.**

### IV.C.2 APPLICATION CONTENT

**IV.C.2.1 Cover Page** – The cover page shall consist of a fully completed SF 424 - Application for Federal Assistance. A person legally authorized to commit your organization to performance of the project must sign this form. Inclusion of a properly signed SF 424 in your application is a mandatory requirement. Failure to adhere to this requirement will result in the elimination of your application from further consideration.

**IV.C.2.2 Assurances** – Include with your application a completed and signed SF 424B – Assurances – Non-Construction Programs or an SF 424D – Assurances – Construction Programs. A person legally authorized to commit your organization to performance of the project must sign this form. Inclusion of a properly signed SF 424B or SF 424D in your application is a mandatory requirement. Failure to adhere to this requirement will result in the elimination of your application from further consideration.

**IV.C.2.3 Title Page** – Provide a brief, informative and descriptive title for the proposed work that indicates the nature of the project. Include the name and address of the applicant, and the name and address, email address, telephone and facsimile numbers of the project manager.

**IV.C.2.4 Table of Contents** – List all major sections of the technical proposal in the Table of Contents.

**IV.C.2.5 Executive Summary** - See the executive summary format, included in *Section V* of this document. The summary includes general project information, project criteria, technical proposal and funding plan.

**IV.C.2.5.1 General Project Information** – Include the project name, applicants name and address, contact information and a summary of funding request. A one paragraph project overview shall be included in this section.

**IV.C.2.5.2 Summary of Project Criteria** – Include a brief narrative of the fish screen program. Discuss the project benefits and the project financing and cost-sharing.

### IV.C.2.6 Technical Proposal

See the technical proposal format, included in *Section V* of this document. The content of the

technical proposal is described below.

**IV.C.2.6.1 Background Data** – Include location (state, county, and direction from nearest town) and other appropriate information, including the applicant's average annual water supply (in acre feet), major crops, total acres served, miles of canals, miles of laterals, existing irrigation improvements (type, miles, acres), canal and lateral seepage losses and on-farm efficiency.

**IV.C.2.6.2 Consistency with State or Local Water Plan** – Applicants are required to ensure that the proposed project is consistent with any existing local (i.e. county, municipal or regional) water plan, or with the Bureau of Reclamation Central Valley Project current criteria for evaluating water management plans available at <http://www.usbr.gov/mp/watershare/documents.html#criteria>.

**IV.C.2.6.3 Project Description** – Describe in detail the work to be carried out. Break the proposed work, including reporting, into major tasks. Discuss the approach to accomplish the proposed work. This discussion shall be in sufficient detail to permit a comprehensive evaluation of the proposal. An estimated schedule demonstrating the stages and duration of the construction of the project shall be included. Engineering plans, designs and analyses should be included, if available. These plans should be in the Appendix of the proposal.

Describe water conservation measures to be taken pursuant to the proposed action. If applicable, the applicant should describe how the proposal will improve its operational efficiency. Include engineering plans and/or designs that demonstrate how the proposal would improve operational efficiency or achieve water savings.

**IV.C.2.6.4 Performance Measures Plan** - Include a performance(s) assessment plan and a list of project-specific performance measures that will be used for project monitoring to assess project success in the relation to goals and objectives. Describe the monitoring and assessment procedures that will be used to quantify actual project benefits, including water conserved, better managed, or water marketed, upon completion of the project. Include information about how the data and other information will be handled, stored, and made accessible. Provide a list of expected products/outcomes such as reports and other documentation, presentations, advances in technology, and information transfers via workshops, seminars, education programs, etc.

**IV.C.2.6.5 Environmental and Regulatory Compliance** – Applicants are required to comply with all applicable state, Federal, and local environmental, cultural, and archeological resource protection laws and regulations. These may include, but are not limited to, the National Environmental Policy Act (NEPA), Clean Water Act (CWA), Endangered Species Act (ESA), National Historic Preservation Act (NHPA) – which could require consultation with the State Historic Preservation Office (SHPO) or Tribal Historic Preservation Officer (THPO) if applicable and possibly consultation with potentially affected Tribes. This includes adhering to the Council of Environmental Quality, Department of the Interior, and Reclamation policy and regulations for implementing these laws.

Reclamation will be completing the appropriate documentation required to comply with the statutory requirements of NEPA for the funding and implementation of the overall fish screening program. Any site specific environmental commitments resulting from the NEPA document will be the sole responsibility of the grantee and will be required prior to individual fish screening project construction and implementation. In general, compliance with NHPA, ESA, CWA, and

permit acquisition will be required for most projects. The grantee will be responsible for the funding and/or performance of the activities involved in complying with the laws and environmental commitments as determined by Reclamation. Environmental compliance activities associated with fish screen projects may include, but are not limited to, compilation of data and information, drafting documents, and survey and consultation performance as outlined below.

- NHPA
  - Record Search
  - Survey Performance
  - Report Preparation
- ESA
  - Document Preparation
  - Consultation
- CWA
  - Wetland Delineation
  - Permit Acquisition
  - Mitigation

Reclamation will coordinate with the grantee to determine the necessary activities and appropriate level of documentation that is required to comply with all applicable environmental laws and regulations. Any field surveys, prepared documentation and drafts produced by the applicants for use by Reclamation must be approved by and adopted by the agency.

In addition, the recipient must obtain any additional required approvals and state and/or county permits (i.e. Oregon Division of State Lands, and Oregon Department of Environmental Quality, and Klamath County), prior to beginning construction. The recipient shall coordinate and obtain any approvals from owners of diversion sites.

FEDERAL FUNDS WILL NOT BE RELEASED TO A GRANT RECIPIENT UNTIL ALL APPROPRIATE ENVIRONMENTAL COMPLIANCE IS COMPLETE AND APPROVED BY RECLAMATION. RECIPIENTS OF FEDERAL FUNDS MAY NOT UNDERTAKE ANY **GROUND DISTURBING ACTIONS** UNTIL NOTIFIED BY RECLAMATION IN WRITING THAT THESE PROCESSES ARE COMPLETE.

In order to allow Reclamation to determine the necessary environmental compliance requirements, the applicant, upon selection of a potential screening project shall provide a detailed narrative of the proposed project and any associated engineering design data. When preparing the narrative, please provide the required information below to the best of your knowledge.

**Required information:**

- Project Location
  - Township, Range, Section
  - Associated index number and name of 7.5 Minute Quadrangle Map
  - Detailed Project Map
- Detailed Project Description
  - Proposed project activities
  - Construction process

- Required equipment
- Project Timeline
- Any other relevant information

**Note: As the grantee/applicant is responsible for the above stated environmental compliance, all associated costs should be estimated and included in the budget table as articulated in Section V.8 for the proposed project.**

#### **IV.D. FUNDING PLAN INSTRUCTIONS**

The applicant's proposal shall include a funding plan that describes how the non-Reclamation share of the project costs will be obtained. See the Funding Plan format, included at *Section V* of this document. Reclamation will use this information in making a determination of financial capability. Applicants must be willing to fund at least 50% of the project costs and provide documentation showing the sources of non-Reclamation funding that total 50% or more of the project costs. This is a mandatory requirement for all proposals submitted in response to this funding opportunity announcement.

#### **IV.E. BUDGET PROPOSAL INSTRUCTIONS**

##### **IV.E.1 General Requirements**

Include a budget with the estimated costs to conduct the proposed activity. The budget should include the sources and values of in-kind contributions of goods and services as well as funds provided to complete the activity (i.e. include the total cost of the activity, and not just the requested funds).

##### **IV.E.2 Budget Proposal Format**

The project budget shall include detailed information for the categories listed below. The project budget shall clearly identify all project costs and the funding source, i.e., Reclamation, or other funding sources. (See sample table in Section V)

Additionally, applicants should include a narrative description of the items included in the project budget. Submission of the following information is mandatory. Award will not be made to any applicant who fails to fully disclose the following information.

**IV.E.2.1 Salaries and Wages** – Indicate program manager and other key personnel by name and title. Other personnel may be indicated by title alone. For all positions, indicate salaries and wages, estimated hours or percent of time, and rate of compensation proposed. All labor estimates, including any proposed subcontractors, shall be allocated to specific tasks as outlined in the Recipient's technical proposal. Labor rates and proposed hours shall be displayed for each task.

Clearly identify any proposed salary increases and the effective date.

Generally, salaries of administrative and/or clerical personnel should be included as a portion of your indirect costs. If these salaries can be adequately documented as direct costs, they may be included in this section; however, an explanation should be included in your budget narrative.



**IV.E.2.2 Fringe Benefits** – Indicate rates/amounts, what costs are included in this category, and the basis of the rate computations. Indicate whether these rates are used for proposal purposes only or whether they are fixed or provisional rates for billing purposes. Federally approved rate agreements are acceptable for compliance with this item.

**IV.E.2.3 Travel** – Include purpose of trip, destination, number traveling, length of stay and all travel costs including airfare (basis for rate used), per diem, lodging, and miscellaneous travel expenses. For local travel, include mileage and rate of compensation.

**IV.E.2.4 Equipment** – Itemize costs of all equipment having a value of over \$500 and include rental per hour or purchase amount, and information as to the need for this equipment.

**IV.E.2.5 Supplies** – Itemize supplies by major category, quantity, and purpose, such as whether the items are needed for office use, research, or construction.

**IV.E.2.6 Contractual** – Identify all work that will be accomplished by subrecipients, consultants, or contractors, including a detailed budget estimate of time, position titles and their labor rates, supplies, materials, indirect cost rate that will be required for the task. If a subrecipient, consultant, or contractor is proposed and approved at time of award, no other approvals will be required. Any changes or additions will require a request for approval.

**IV.E.2.7 Environmental and Regulatory Compliance Costs** – The grantee/applicant is responsible for *ALL* costs associated with environmental compliance as described in Section IV.C.2.6.5.

**IV.E.2.8 Performance Measures & Monitoring Project Benefits** –Applicant needs to budget for the cost of monitoring project benefits and preparing the Project Monitoring/ Performance Measures Reports. If money is not budgeted for project monitoring, Reclamation has the right to disqualify proposal or withhold the appropriate amount of awarded funds for project monitoring as determined by the Grants Officer.

**IV.E.2.9 Other** – Any other expenses, such as those for reporting, not included in the above categories shall be listed in this category, along with a description of the item and what it will be used for. **No profit or fee will be allowed.**

Funding for contingencies will only be considered in association with construction projects. Proposals for construction contingency funding at a rate greater than 10% will not be found acceptable.

**IV.E.2.10 Indirect Cost** – Show the proposed rate, cost base, and proposed amount for allowable indirect costs based on the applicable OMB circular cost principles (see Section IX) for the recipient's organization. It is not acceptable to simply incorporate indirect rates within other direct cost line items.

If the recipient has separate rates for recovery of labor overhead and general and administrative costs, each rate shall be shown. The applicant should propose rates for evaluation purposes that will be used as fixed or ceiling rates in any resulting award. Include a copy of any federally approved Indirect Cost Rate Agreement.

Funding Opportunity Announcement R10AF20010  
Upper Klamath Basin Fish Screen Program

If you do not have a Federally-approved Indirect Cost Rate Agreement or if unapproved rates are used, explain why, and include the computational basis for the indirect expense pool and corresponding allocation base for each rate. Guidance for preparing your indirect cost proposals (ICPs) or cost allocation plan (CAP) is available from the Department of the Interior, National Business Center, Indirect Cost Section, at <http://www.aqd.nbc.gov/services/ICS.aspx>.

**IV.E.2.11 Total Cost** – Indicate total amount of project costs, including the Federal and non-Federal cost share amounts.

**IV.E.2.12 Budget Information** – In addition to the above-described budget information, the applicant must complete an SF 424A, Budget Information – Nonconstruction Programs, or an SF 424C, Budget Information, Construction Programs.

#### **IV.F. DATE FOR RECEIPT OF APPLICATIONS**

Applications will be accepted until 3:00 p.m., Pacific Standard Time, on *July 19, 2010*. Applications received after this date and time will not be considered for award.

#### **IV.G. APPLICATION DELIVERY INSTRUCTIONS**

Proposals can be submitted by hard copy or through [www.grants.gov](http://www.grants.gov). If submitting your application through Grants.gov, please allow at least three (3) working days for processing. (Electronic mail or facsimile transmissions will not be accepted). Hard copy and disk, please mail to:

Bureau of Reclamation, MP Region  
Attn: Mary Sims, Mail Code: MP-3833  
2800 Cottage Way, Room E-1815  
Sacramento CA 95825-1898

#### **IV.H. APPLICATION SUBMISSION CHECKLIST**

An Application Submission Checklist is included on *page 4 and 5* of this FOA. The Checklist contains a summary of the information you are required to submit with your application.

## **SECTION V – REQUIRED PROPOSAL FORMAT**

---

This section contains the forms and formats for your proposal that will meet the proposal submission requirements stated in this Funding Opportunity Announcement.

**V.1** Cover Page -- SF-424 Application for Financial Assistance form

**V.2** SF-424B, Assurances – Non-construction Programs, or SF-424D, Assurances – Construction Programs form

**V.3** Title Page

**V.4** Table of Contents

**V.5** Executive Summary

**V.6** Technical Proposal

**V.7** Funding Plan

**V.8** Budget Proposal

**V.9** Budget Narrative

**V.10** Budget Form – SF 424A, Non-construction Programs, or SF 424C, Construction Programs

## **V.1 COVER PAGE** (Section IV.C.2.1)

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Include an SF 424 Application for Financial Assistance. **Provide a Dun and Bradstreet number which is assigned when registered on the Central Contractor's Registry (CCR).**  
[www.ccr.gov](http://www.ccr.gov)

## **V.2 ASSURANCES FORM** (Section IV.C.2.2)

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Include a signed SF 424B, Assurances – Non-construction Programs, or SF 424D, Assurances – Construction Programs form

**V.3 TITLE PAGE** (Section IV.C.2.3)

---

# **Upper Klamath Basin Fish Screen Program**

**PROJECT NAME**

**PROJECT LOCATION**

**Applicant Name**

**Applicant Address**

**Date**

## **V.4 TABLE OF CONTENTS** (Section IV.C.2.4)

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### **TABLE OF CONTENTS**

	<b>Page No.</b>
<b>Cover Page</b>	
<b>Assurances Form</b>	
<b>Title Page</b>	
<b>Table of Contents</b>	
<b>Executive Summary:</b>	
<b>General Project Information/Project Criteria</b>	
<b>Technical Proposal</b>	
<b>Funding Plan</b>	
<b>Budget Proposal</b>	
<b>Budget Narrative</b>	
<b>Budget Form</b>	

<b>V.5 Part I -- EXECUTIVE SUMMARY</b> (Section IV.C.2.5) <i>(Please limit Executive Summary responses to a maximum of six pages)</i>																									
<b>A. General Project Information</b> (Section IV.C.2.5.1)																									
A.1	Date:  Applicant Name:  City, County, State:																								
A.2	Project Name:																								
A.3	2010 Funding Request Summary <i>[Use * to denote an in-kind contribution]</i>  <table border="1" style="margin-left: auto; margin-right: auto; border-collapse: collapse; text-align: center;"> <thead> <tr> <th style="padding: 5px;">FUNDING SOURCE</th> <th style="padding: 5px;">FUNDING AMOUNT</th> </tr> </thead> <tbody> <tr> <td style="padding: 5px;">Non-Federal Entities:</td> <td style="padding: 5px;"></td> </tr> <tr> <td style="padding: 5px;"></td> <td style="padding: 5px;"></td> </tr> <tr> <td style="padding: 5px;"></td> <td style="padding: 5px;"></td> </tr> <tr> <td style="padding: 5px;"></td> <td style="padding: 5px;"></td> </tr> <tr> <td style="padding: 5px;"></td> <td style="padding: 5px;"></td> </tr> <tr> <td style="padding: 5px;"></td> <td style="padding: 5px;"></td> </tr> <tr> <td style="padding: 5px;">Non-Federal Subtotal:</td> <td style="padding: 5px;"></td> </tr> <tr> <td style="padding: 5px;"></td> <td style="padding: 5px;"></td> </tr> <tr> <td style="padding: 5px;">Reclamation Funding:</td> <td style="padding: 5px;"></td> </tr> <tr> <td style="padding: 5px;"></td> <td style="padding: 5px;"></td> </tr> <tr> <td style="padding: 5px;">TOTAL PROJECT FUNDING:</td> <td style="padding: 5px;"></td> </tr> </tbody> </table>	FUNDING SOURCE	FUNDING AMOUNT	Non-Federal Entities:												Non-Federal Subtotal:				Reclamation Funding:				TOTAL PROJECT FUNDING:	
FUNDING SOURCE	FUNDING AMOUNT																								
Non-Federal Entities:																									
Non-Federal Subtotal:																									
Reclamation Funding:																									
TOTAL PROJECT FUNDING:																									
A.4	One paragraph project summary:																								
A.5	This project is being submitted under Task Area _____. Identify how this project contributes to accomplishment of the goals task area. (See section I.A)																								
A.6	Contact for Further Information: Name:  Title:  Telephone:  E-mail:																								
<b>B. Summary of Project Criteria.</b> (Section IV.C.2.5.2) <b>(Review evaluation criteria, located in Section VI.B of this document, in preparing your responses).</b>																									
B.1	Fish Screen Program, demonstration projects or implementation																								
B.1.1	Briefly describe experience designing and installing state-of-the-art fish screens on large and small irrigation delivery systems.																								
B.1.2	Describe experience and success administering a fish screen program working with multiple landowners and interests groups, such as locally based Watershed Councils.																								



Funding Opportunity Announcement R10AF20010  
Upper Klamath Basin Fish Screen Program

B.1.3	Describe demonstrated success and experience developing binding agreements with private landowners leading to design and construction of fish screens on large and small diversions.
B.1.4	State how the project is connected to Reclamation project activities. i.e. How will it meet Reclamation's ESA entrainment reduction requirements.
B.2	Demonstrated Results
B.2.1	Briefly describe the project benefits expected from this fish screen project
B.3	Project Financing and Cost-Sharing
B.3.1	<p>Provide the following information demonstrating that the applicant has the financial ability to pay for estimated construction costs and any increase in operation and maintenance costs associated with the project:</p> <p>(a) Is a funding plan identifying all sources of non-Reclamation funding included in the proposal? Yes ____</p> <p>(b) Describe any documentation supporting the funding plan that demonstrates that the cost-share funds are available (operating budget or excerpts from a financial analysis or report):</p> <p>(c) Provide an estimate of any change in operation and maintenance costs (increase or decrease) as a result of the proposed work:</p> <p>(d) Are letters of commitment from all cost-sharing partners included with the proposal? Yes ____</p>
B.3.2	Does the budget identify direct, indirect, environmental and contingency costs? Yes ____ No ____ If not, explain why.
B.3.3	<p>Is 50% or more non-Federal funding provided? Yes ____ No ____</p> <p>If more than 50%, state the percentage of non-Federal funding provided:     %</p>
<b>V.6 Part II -- TECHNICAL PROPOSAL (Section IV.C.2.6)</b>	
<b>A</b>	<b>Background Data</b> Include the following information about the applicant.
A.1	Location (state, county, and direction from nearest town):
A.2	Describe Applicant's average annual water supply (in acre feet):
A.3	Describe water use (i.e. municipal, irrigation, etc.):
A.6	Describe any other relevant background information:
<b>B</b>	<b>Consistency with State or Local Water Plan</b>
B.1	<p>State whether the proposed project is consistent with the state or local water plan. Yes ____ No ____</p> <p>If yes, identify the applicable plan:</p>

Funding Opportunity Announcement R10AF20010  
Upper Klamath Basin Fish Screen Program

	If no, state why the project should be considered:
<b>C</b>	<b>Project Description</b>
C.1	Describe in detail the work and approach to be used to carry out the proposed work. This description shall be in sufficient detail to permit a comprehensive evaluation of the proposal.
C.2	Provide an estimated project schedule demonstrating the stages and duration of the proposed work, including major milestones and dates.
C.3	Discuss any deviations from the proposed September 30, 2010, start date and 24-month project duration.
C.4	Briefly describe any engineering plans, designs and analyses prepared in connection with the proposed work and include in the Appendix of the proposal.
C.5	Describe water conservation measures to be taken pursuant to the proposed action.
<b>D</b>	<b>Environmental and Regulatory Compliance</b> (If any question is not applicable to your project, please explain why. If you have any questions, please contact your local Reclamation office.)
D.1	Will the proposed work impact the surrounding environment (i.e. soil (dust), air, water (quality and quantity), animal habitat, etc.)?  If so, please explain the impacts and any steps that could be taken to minimize the impacts.
D.2	Are you aware of any endangered or threatened species in the project area?
D.3	Are there wetlands in the project area?  If so, please estimate how many acres of wetlands there are, and any impact the proposed work will have on the wetlands.
D.4	When was your irrigation water distribution system constructed?
D.5	If your project will affect individual features of the irrigation system (e.g., headgates, canals or flumes), state when those features were constructed and describe any extensive alterations or modifications to those features, including when such alterations or modifications took place.
D.6	Are any buildings, structures, or features in your irrigation district listed or eligible for listing on the National Register of Historic Places?  Your local Reclamation office can assist you in answering this question.
D.7	Are there any known archeological sites in the proposed project area?
D.8	State whether any permits or approvals are required, and explain the applicant's plan for obtaining such permits or approvals.

Funding Opportunity Announcement R10AF20010  
Upper Klamath Basin Fish Screen Program

<b>E</b>	<b>Environmental Compliance Costs</b>
E.1	<p>State whether a line item for environmental compliance costs has been included in the budget. Yes ____ No ____</p> <p>If no, please explain why.</p>
<b>V.7 Part III – Funding Plan (Section IV.D)</b>	
A	Describe how the Applicant will make its contribution to the cost share requirement, including a description of monetary and in-kind contributions, and identification of the source funds contributed by the applicant (e.g., reserve account, tax revenue and/or assessments):
B	<p>If project funding is being provided by funding partners, not including the applicant or Reclamation, please provide the following information:</p> <p>(a) Identify the funding partners and state the amount of funding to be provided by each:</p> <p>(b) Specify whether the required letters of commitment are attached to the proposal:</p>
C	If your request for Federal funding is greater than \$50,000, discuss what lesser amount would be acceptable if Reclamation is unable to provide your total funding request. Discuss any decrease in project size or other problems due to decreased Federal funding.
D	Describe any other Federal funding requested or received for the proposed work. Note, Federal funding may not be counted towards the applicant's 50% cost share requirement.
E	Describe any other pending funding requests for the proposed work that have not yet been approved, and explain how the project will be affected if such funding is denied.

## V.8 BUDGET PROPOSAL (Section IV.E.2)

BUDGET ITEM DESCRIPTION	COMPUTATION		RECIPIENT FUNDING	RECLAMATION FUNDING	TOTAL COST
	\$/Unit and Unit	Quantity			
1. SALARIES AND WAGES					
Employee 1					
Employee 2					
2. FRINGE BENEFITS					
Full-time employees					
Part-time employees					
3. TRAVEL					
Trip 1					
Trip 2					
4. EQUIPMENT					
Item A					
Item B					
Item C					
5. PROJECT MONITORING/ PERFORMANCE MEASURES					
6. SUPPLIES/MATERIALS:					
Office Supplies					
Construction					
7. *CONTRACTUAL/ CONSTRUCTION					
8. ENVIRONMENTAL AND REGULATORY COMPLIANCE COSTS					
9. OTHER:					
Reporting					
<b>TOTAL DIRECT COSTS</b>					
10. INDIRECT COSTS - __%					
<b>TOTAL PROJECT COSTS</b>					

\*Provide detailed breakdown of these costs (i.e. personnel/fringe benefit, equipment, supplies, indirect cost rate, etc.)

### Sources of Funding

Recipient

Cash: \_\_\_\_\_

In-Kind Services: \_\_\_\_\_

Partner (1) \_\_\_\_\_

Cash: \_\_\_\_\_

In-Kind Services: \_\_\_\_\_

Partner (2) \_\_\_\_\_

Cash: \_\_\_\_\_

In-Kind Services: \_\_\_\_\_

Reclamation: \_\_\_\_\_

Total Activity Funding: \_\_\_\_\_

## V.9 BUDGET NARRATIVE (Section IV.E.2)

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The activity budget should include sufficient **detailed** information to enable us to evaluate the reasonableness of the budgeted amount. In all cases, sufficient information must be provided to allow a determination that the budget is fair and reasonable for the proposed activity. Award will not be made to any applicant who fails to fully disclose this information.

## **V.10 BUDGET FORM** (Section IV.E.2.12)

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Include either an SF 424A, Budget Information–Non-construction Programs, or an SF 424C, Budget Information–Construction Programs

## SECTION VI – APPLICATION REVIEW INFORMATION

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### VI.A. EVALUATION CRITERIA

Applications will be evaluated by a technical panel in accordance with these criteria and the corresponding weight assigned to each criterion.

The following criteria and points will be used to score the applications received. This information is provided to assist the applicant in preparing a detailed project description. Your application should thoroughly address each of the criteria and subcriteria in the order presented to assist in the complete and accurate evaluation of your application.

The FWS, ODFW, and CDFG announce interim criteria to be applied when installing fish screens on irrigation diversions in the upper Klamath Basin (above Iron Gate Dam). Fish screens can significantly reduce entrainment of native fishes, including redband trout, and endangered Lost River and shortnose suckers and the three agencies recommended they be used. The three resource agencies have agreed that the recommended interim screening criteria will be consistent with the criteria NOAA Fisheries has specified for juvenile salmonids in the Pacific Northwest.

These are interim criteria because they will be superseded in the future by National Oceanic and Atmospheric Administration (NOAA) Fisheries criteria that are being revised, and the adoption of rules by ODFW will provide fish screening and passage criteria applicable to all of Oregon. In one deviation from the NOAA Fisheries criteria, FWS and ODFW recommend that in slack-water diversion situations where a fish bypass system is not practical, fish screens be designed with approach velocities of 0.2 feet/second, to allow weaker swimming juvenile fish to escape the effects of impingement on the fish screen. Other site specific variances will be considered by the three agencies on a case-by-case basis.

The Bureau of Reclamation has agreed to use the criteria recommended by the FWS, ODFW, and CDFG in order to be consistent with the criteria the (NOAA) Fisheries has specified for juvenile salmonids in the Pacific Northwest. (See Section IV.B.)

Section 12.6 contains current acceptable NOAA fish screen criteria which have been adopted by FWS, ODFW, and CDFG to protect endangered suckers from the risks of entrainment in the Upper Klamath Basin. Any deviations from these criteria must be approved by FWS, ODFW, and CDFG.

**12.0 *Description, Purpose and Rationale:*** *This section provides criteria and guidelines to be utilized in the development of designs of downstream migrant fish screen facilities for hydroelectric, irrigation, and other water withdrawal projects. Consistent with the terminology used throughout this document, criteria are specified by the word “shall” and guidelines are specified by the word “should”. Criteria are required design features, unless site specific conditions preclude their use and a site-specific written waiver is provided by NOAA Fisheries (also see Foreword). Guidelines are not required, but deviation from a guideline require a written explanation by the project designer. It is suggested that deviation from a guideline be discussed with NOAA Fisheries prior to final design. In designing an effective fish screen facility, the swimming ability of the fish is a primary consideration. Research has shown that swimming ability of fish varies and may depend upon a number of factors relating to the physiology of the fish, including species, size, duration of swimming time required, behavioral aspects, migrational stage, physical condition and others, in addition to water quality parameters*

*such as dissolved oxygen concentrations, water temperature, lighting conditions, and others. For this reason screen criteria must be expressed in general terms.*

*Since these criteria and guidelines are general in nature, there may be cases where site constraints or extenuating biological circumstances dictate that certain criteria or guidelines be waived or modified, without delaying or otherwise adversely impacting fish migration. It is the responsibility of the project sponsor provide compelling evidence in support of any proposed waiver. Particular fishway elements that can not be designed to meet these criteria and guidelines should be discussed with NOAA Fisheries engineering staff as early in the design process as possible to explore potential options. Conversely, where NOAA Fisheries deems there is a need to provide additional protection for fish, more restrictive site-specific criteria may be added. These circumstances will be considered by NOAA Fisheries on a project-by-project basis. To facilitate construction of any fish passage facility, rationale for criteria waivers shall accompany design documents sent to NOAA Fisheries staff for review. Several categories of screen designs are in use but are still considered as experimental technology by NOAA Fisheries. These include Eicher screens, modular inclined screens, coanda screens, and horizontal screens. Criteria for experimental screens can be developed through discussions with NOAA Fisheries engineers, on a case-by-case basis. The process to evaluate experimental technology is described in Section 17.*

#### **12.6. Screen Hydraulics - Rotating Drum Screens, Vertical Screens and Inclined Screens**

*12.6.1 The approach velocity shall not exceed 0.40 feet per second (ft/s) for active screens, or 0.20 ft/s for passive screens. For screen design, approach velocity is calculated by dividing the vertical projection of the effective screen area into the diverted flow amount. This approach velocity will minimize screen contact and/or impingement of juvenile fish.*

*12.6.2 The effective screen area required is calculated by dividing the maximum diverted flow by the allowable approach velocity.*

*12.6.3. For rotating drum screens, the design submergence shall not exceed 85%, nor be less than 65% of drum diameter. Submergence over 85% of the screen diameter increases the possibility of entrainment over the top of the screen (if entirely submerged), and increases the chance for impingement with subsequent entrainment if fish are caught in the narrow wedge of water above the 85% submergence mark.*

*Submerging rotating drum screens less than 65% will reduce the self-cleaning capability of the screen. In many cases, stop logs can be installed downstream of the screens to achieve proper submergence. If stoplogs are used, they should be located at least two drum diameters downstream of the back of the drum.*

*12.6.4 The screen design shall provide for nearly uniform flow distribution (see section 16) over the screen surface, thereby minimizing approach velocity over the entire screen face. The screen designer shall show how uniform flow distribution is to be achieved. Providing adjustable porosity control on the downstream side of screens, and/or flow training walls may be required. Large facilities may require hydraulic modeling to identify and correct areas of concern. Uniform flow distribution avoids localized areas of high velocity, which have the potential to impinge fish.*

*12.6.5 Screens longer than six feet shall be angled and shall have sweeping velocity greater*



*than the approach velocity. This angle may be dictated by site specific geometry, hydraulic, and sediment conditions. Optimally, sweeping velocity should be at least 0.8 ft/s and less than 3 ft/s.*

*12.6.6 Sweeping velocity shall not decrease along the length of the screen.*

*12.6.7 The plane of an inclined screen shall be oriented at 45° or more relative to the downstream water surface. Horizontally inclined screens are currently under evaluation, and considered as experimental technology (Section 17).*

## **VI.B. EVALUATION CRITERIA RANKING:**

Proposals will be evaluated by a technical panel in accordance with the criteria list:

**VI.B.1** Experience successfully designing and installing state-of-the art fish screens on large and small irrigation delivery systems. **Weight = 20 points**

**VI.B.2** Experience and success administering a fish screen program working with multiple landowners and interests groups, such as locally based Watershed Councils. **Weight = 20 points**

**VI.B.3** Demonstrated success/experience developing binding agreements with private landowners leading to the design and construction of fish screens on large and small diversions. **Weight = 20 points**

**VI.B.4** Degree of commitment to provide cost-share dollars to match against the Federal contribution of \$100,000.00 **Weight = 40 points**

## **VI.C. EVALUATION PROCESS**

Available funding for financial assistance is generally limited and will not cover all anticipated applications. Reclamation uses a formal process to identify the proposals to be funded. The process will evaluate and rank each proposal on its ability to meet Reclamation's program goals and objectives.

All applications will undergo an initial screening process. Incomplete applications or those applications that are clearly not in support of the project goals and objectives will be eliminated from further consideration. Applications will also be screened to determine if the proposed activity is eligible for funding under one of the available funding authorities.

## **VI.D. OTHER FACTORS**

Prior to award of an assistance agreement, the Grants Officer will consider several factors in the selection process which are important, but not quantified, such as:

**VI.D.1** Only **one** activity is included in the proposal. You may submit several proposals.

**VI.D.2** Proposals should be submitted by organizations having interests in the Klamath Basin (Basin) water supply in the Klamath River and Lost River watersheds.

**VI.D.3** Proposals submitted from within Reclamation will not be evaluated or returned.

**VI.D.4** Proposals lacking a budget and/or an activity schedule will not be evaluated or returned.

## **VI.E. REVIEW AND SELECTION PROCESS**

The Government reserves the right to reject any and all applications which do not meet the requirements of this solicitation and which are determined to be outside the scope of the project. Awards will be made to the responsible applicants submitting applications that conform to the FOA and are most advantageous to the Government considering the factors and any significant sub factors listed above.

**VI.E.1 First Level Screening.** All proposals will be screened to insure that:

The proposal meets the requirements of the funding opportunity announcement, including submission of technical and budget proposals;

The applicant meets the eligibility requirements stated in Section III of this document;

All required information has been provided; and

The activity meets necessary requirements for providing financial assistance.

A proposal must pass all first level screening criteria in order for it to be forwarded for further consideration at the Second Level Evaluation phase.

### **VI.E.2 Second Level Evaluation (Technical Review)**

The technical evaluation will compare the proposals with the evaluation criteria shown above and will assign points to each of the evaluation factors based upon how well the proposal satisfies each factor. A total score will be determined and the proposals ranked by total score.

### **VI.E.3 Third Level of Evaluation (Managerial Review)**

Management will conduct a final review to prioritize activities based on availability of funds and to ensure Reclamation UKBFSP objectives are being met by the proposed activities.

## **SECTION VII -- AWARD ADMINISTRATION INFORMATION**

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### **VII.A. AWARD NOTICES**

Successful applicants will receive a notice of award of a Grant or Cooperative Agreement document by mail, signed by a Grants Officer, notifying the applicant of project award and project starting date.

## **VII.B. AWARD DOCUMENT**

If your organization is awarded an agreement as a result of this FOA, the applicable portions of Sections II, III, and IX of this document will be included in the resulting agreement.

## **VII.C. REPORTING REQUIREMENTS AND DISTRIBUTION**

If your organization is awarded an agreement as a result of this FOA, you will be required to submit the following types of reports during the term of the agreement.

### **VII.C.1 Financial Reports**

- SF-425, Financial Status Report, (available at <http://www.usbr.gov/mso/aamd/doing-business-financial-assistance.html>)

### **VII.C.2 Program Performance Reports**

- Interim Reports
- Annual Reports
- Final Report
- Project Monitoring/Performance Measures Reports

## **SECTION VIII -- AGENCY CONTACTS**

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Organizations or individuals interested in submitting proposals in response to this announcement may direct questions to Reclamation in writing. Questions may be submitted to the attention of Mary Sims, Grants Officer:

### **By Mail:**

Bureau of Reclamation  
Mid-Pacific Region  
Attn: Mary Sims  
Mail Code: MP-3833  
2800 Cottage Way, Room E-1815  
Sacramento CA 95825-1898

**By FAX:** (916) 978-5175

**By E-mail:** [msims@usbr.gov](mailto:msims@usbr.gov)

## **SECTION IX -- OTHER INFORMATION**

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### **IX.A. STANDARD TERMS & CONDITIONS**

If you are awarded a Grant or Cooperative Agreement as a result of this Request for Funding Opportunity, General and Special Provisions will be included in the agreement at time of award. The provisions are available at <http://www.usbr.gov/mso/aamd/doing-business-financial->

[assistance.html](#).

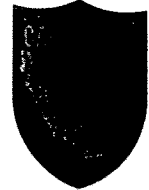
#### **IX.B. FREEDOM OF INFORMATION ACT (FOIA)**

All applications may be subject to FOIA. The Freedom of Information Act (5 U.S.C.A. §552) generally provides that any person has a right, enforceable in court, to obtain access to federal agency records, except to the extent that such records (or portions of them) are protected from public disclosure by one of nine exemptions or by one of three special law enforcement record exclusions. Proprietary information should be marked “Confidential” to assist in alerting the federal agency to information that may be protected from disclosure.

**IX.C. DUNS REQUIREMENT.** All applicants applying for funding must have a Dun and Bradstreet Universal Data Numbering System (DUNS) number. The DUNS number must be included in the data entry field labeled “Organizational Duns” on the form SF-424. Instructions for obtaining a DUNS number can be found at the following website:  
<http://fedgov.dnb.com/webform/displayHomePage.do>.

**IX.D. CENTRAL CONTRACTOR REGISTRY AND CREDENTIAL PROVIDER REGISTRATION.** In addition to having a DUNS number, applicants must register with the Federal Central Contractor Registry and with a Credential Provider. The website at <http://www.grants.gov/GetStarted> provides step-by-step instructions for registering in the Central Contractor Registry and for registering with a credential provider.

The registration process is a separate process from submitting an application. **Applicants are, therefore, encouraged to register early.** The registration process can take approximately two weeks to be completed. Therefore, registration should be done in sufficient time to ensure it does not impact your ability to meet required submission deadlines. If you are filing electronically on grants.gov, you may be able to submit your application anytime after you receive your e-authentication credentials.



JUL 28 2005

*Recommended Interim Fish Screen Criteria for Upper Klamath Basin*

To whom it may concern,

The U.S. Fish and Wildlife Service (FWS), Oregon Department of Wildlife (ODFW) and the California Department of Fish and Game (CDFG) announce interim criteria to be applied when installing fish screens on irrigation diversions in the upper Klamath Basin (above Iron Gate Dam). Fish screens can significantly reduce entrainment of native fishes, including redband trout, and endangered Lost River and shortnose suckers and the three agencies recommend they be used. The three resource agencies have agreed that the recommended interim screening criteria will be consistent with the criteria NOAA Fisheries has specified for juvenile salmonids in the Pacific Northwest:

(<http://www.nwr.noaa.gov/1hydrop/hydroweb/docs/passagetcriteria.extrevdraft.pdf>).

These are interim criteria because they will be superseded in the future by NOAA Fisheries criteria that are being revised, and the adoption of rules by ODFW will provide fish screening and passage criteria applicable to all of Oregon. In one deviation from the NOAA Fisheries criteria which requires a bypass, FWS and ODFW recommend that in slack-water diversion situations where a bypass is not practical (e.g., head of canals), fish screens be designed with approach velocities of 0.2 feet/second, to allow weaker swimming juvenile fish to escape entrainment in the fish screen. Other site specific variances will be considered by the three agencies on a case-by-case basis. The Bureau of Reclamation (Reclamation) has agreed to use these criteria on all new fish screens built by Reclamation in the Klamath Project.

Upper Klamath Basin water users in Oregon and/or California interested in placing fish screens on irrigation diversion structures, and/or getting technical assistance on fish ladder issues, are encouraged to contact Rich Kilbane of the ODFW at (541) 826-8774 or Rick Davis of CDFG at (530) 841-2550



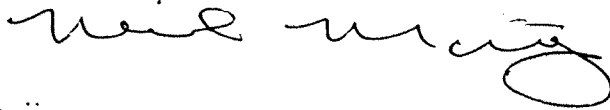
If you have questions about this fish screen guidance please contact: Ron Larson (FWS) at (541) 885-8481, Ray Hartlerode (ODFW) at (503) 947-6215 or Neil Manji (CDFG) at (530) 225-2306.



Curt Mullis  
Field Supervisor  
Klamath Falls Fish and Wildlife Office  
Klamath Falls, Oregon



Ray Hartlerode  
Program Manager  
ODFW Fish Screening & Passage Program  
Bend, Oregon

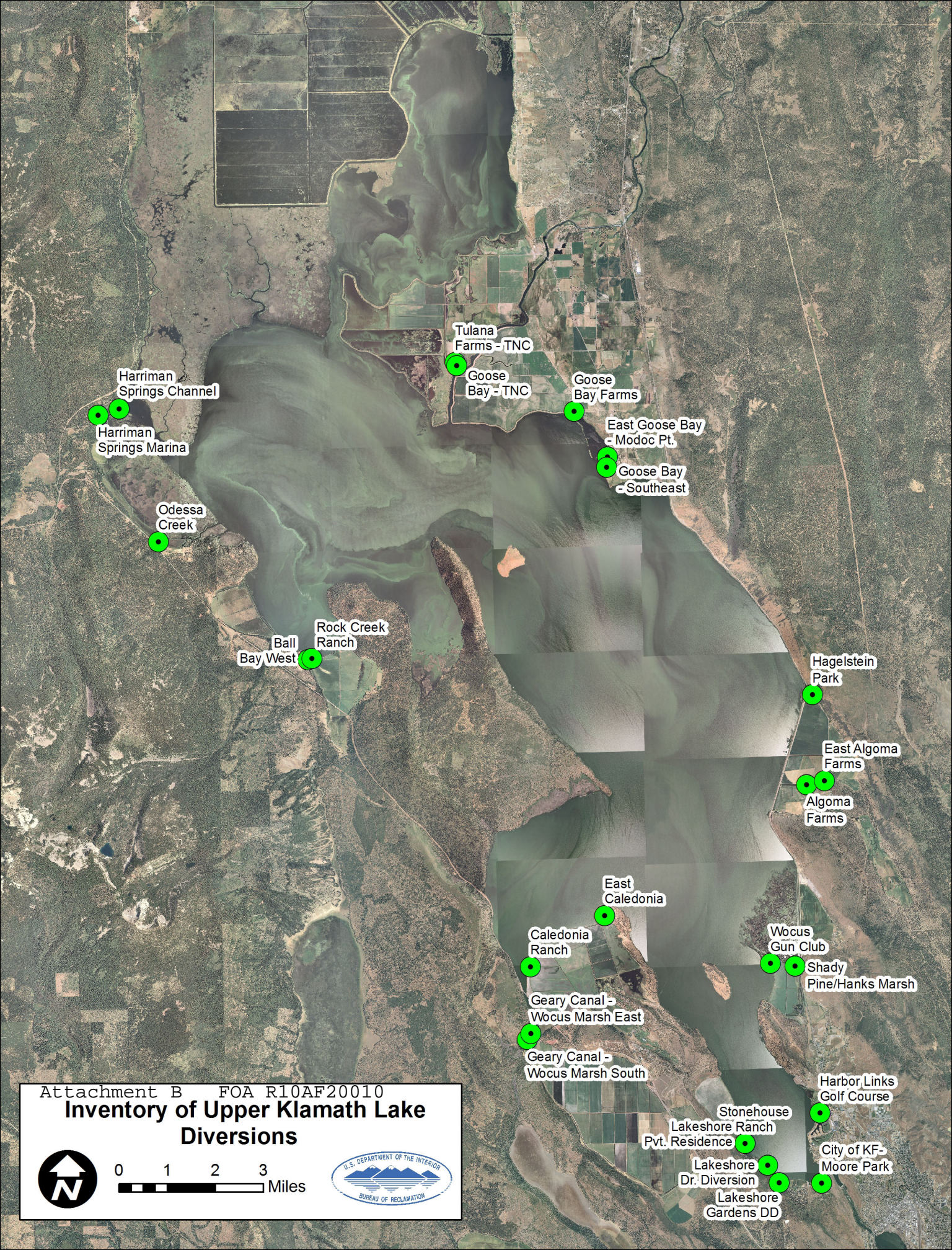


Neil Manji  
Fisheries Program Manager  
California Department of Fish and Game  
Redding, CA

cc:

Roger Smith, ODFW, Klamath Falls, OR  
Rich Kilbane, ODFW, Central Point, OR  
Mike Rode, CFG, Mt Shasta, CA  
Chuck Korson, BOR, Klamath Falls, OR  
Jim Stow, FWS, Portland, OR  
Jerry VanMeter, FWS, Portland, OR





Attachment B FOA R10AF20010

## Inventory of Upper Klamath Lake Diversions

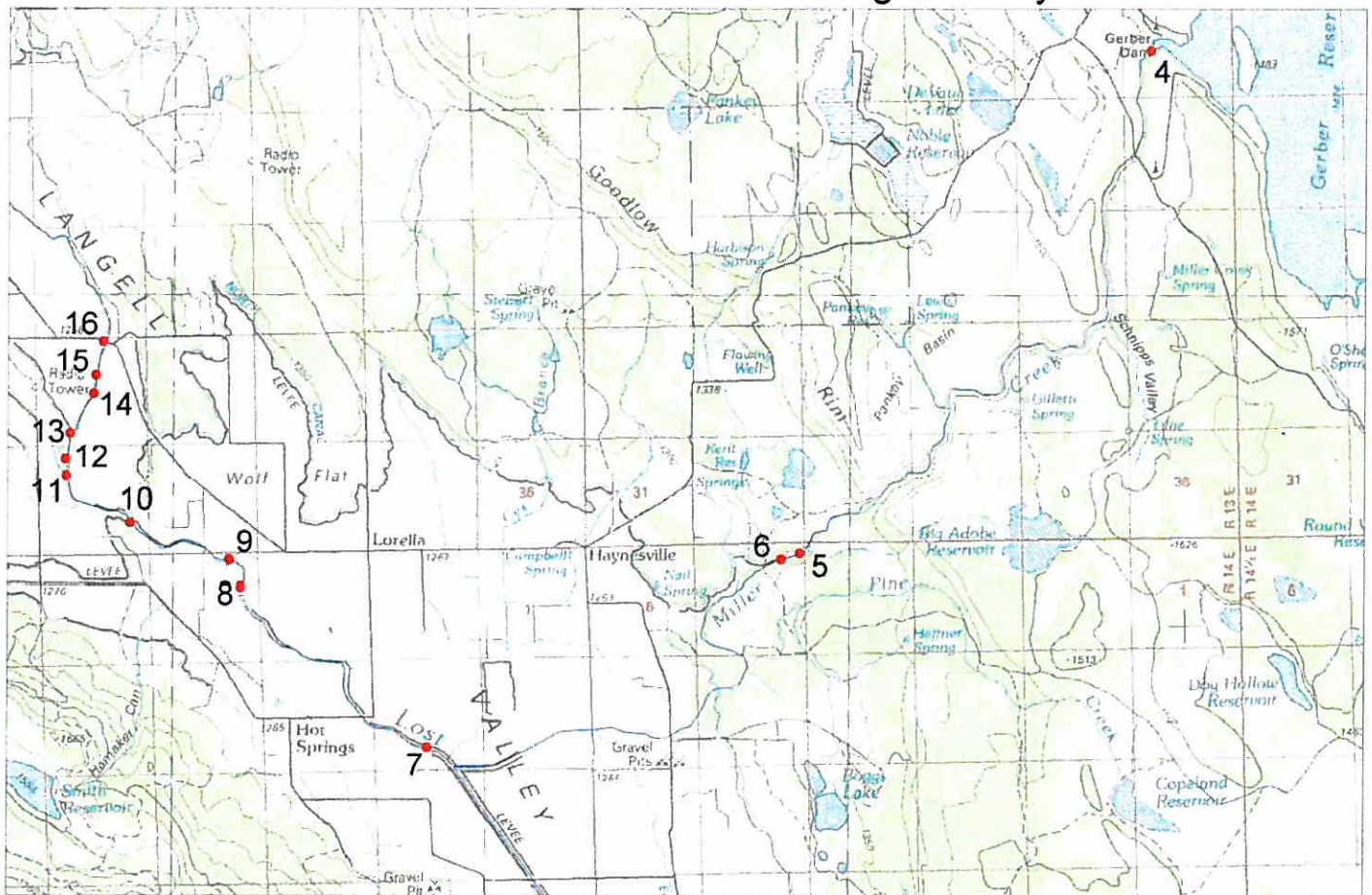


0 1 2 3 Miles





## Klamath Project Service Area Water Diversions Lost River and Miller Creek - Langell Valley



0 1 2 3 4 5 Miles



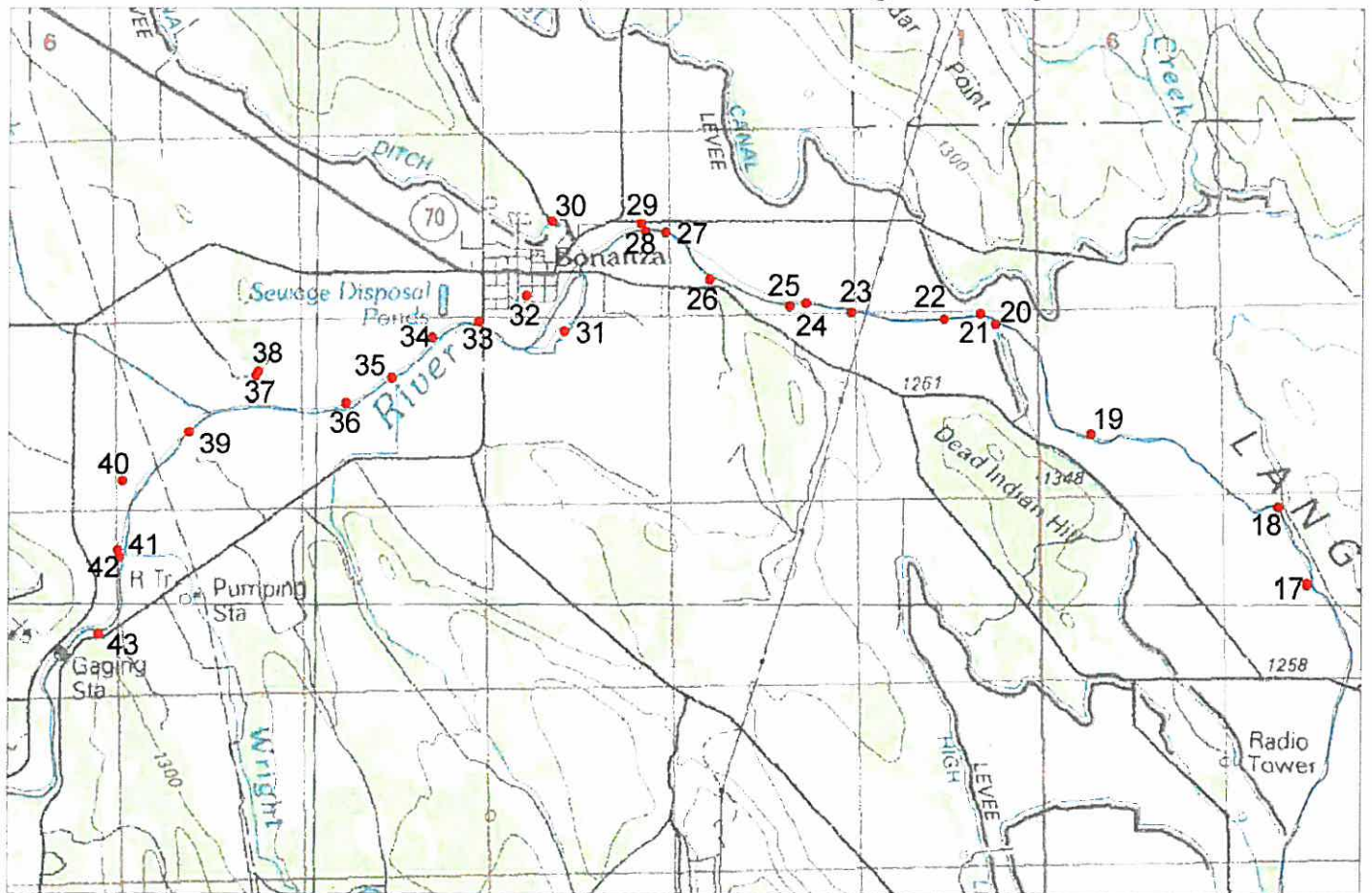
Backdrop: USGS 1:100K Digital Raster Graphic

Projection: UTM Zone 10, NAD 27

Compiled By: B. Peck, USBR Klamath Project Area Office, 12/00



# Klamath Project Service Area Water Diversions Lost River - Harpold Dam to Langell Valley

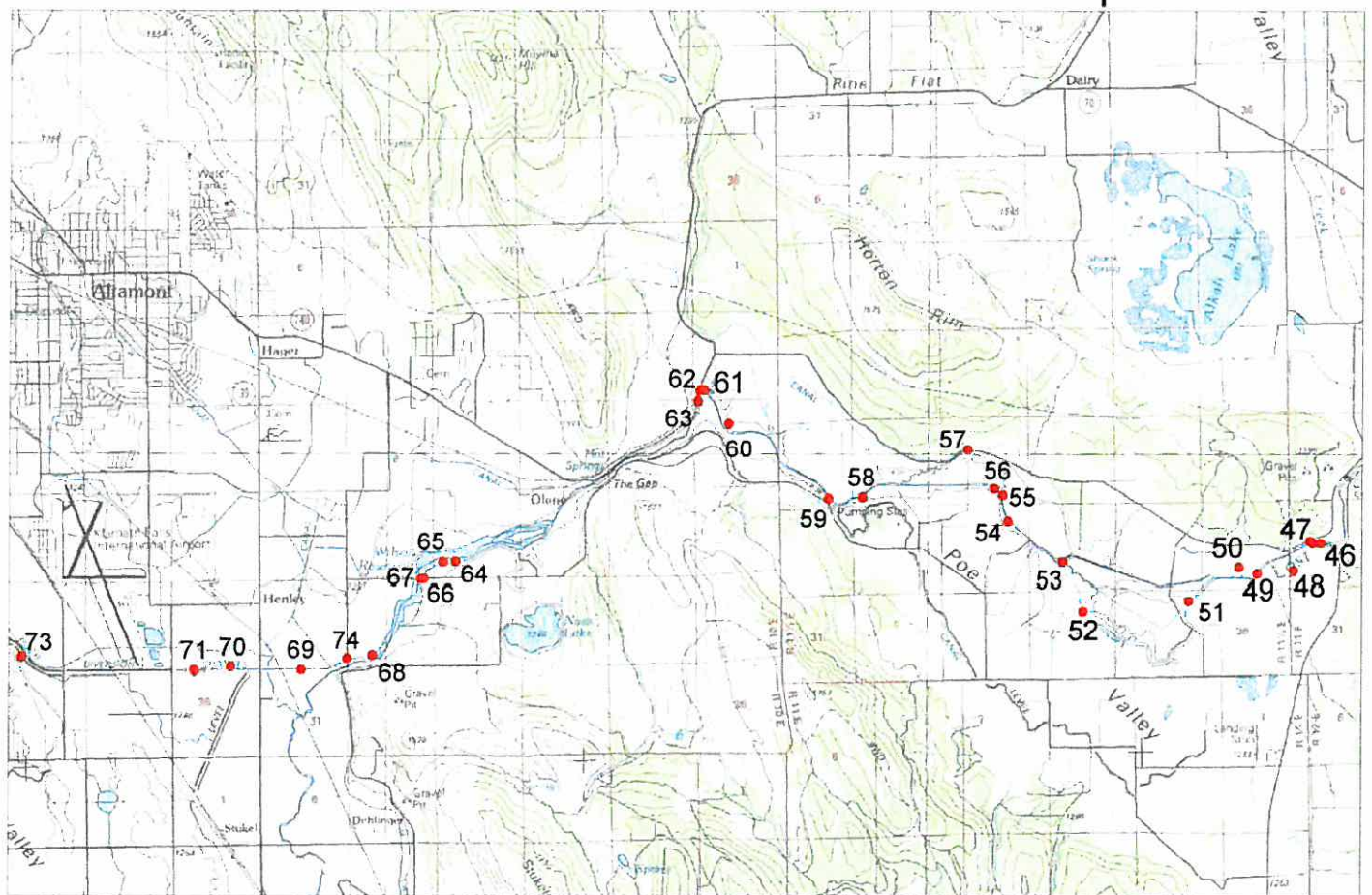


0 1 2 3 Miles



Backdrop: USGS 1:100K Digital Raster Graphic  
 Projection: UTM Zone 10, NAD 27  
 Compiled By: B. Peck, USBR Klamath Project Area Office, 12/00

# Klamath Project Service Area Water Diversions Lost River and Diversion Canal - Wilson Reservoir to Harpold Dam



0 1 2 3 4 5 6 Miles



Backdrop: USGS 1:100K Digital Raster Graphic

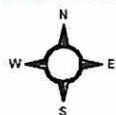
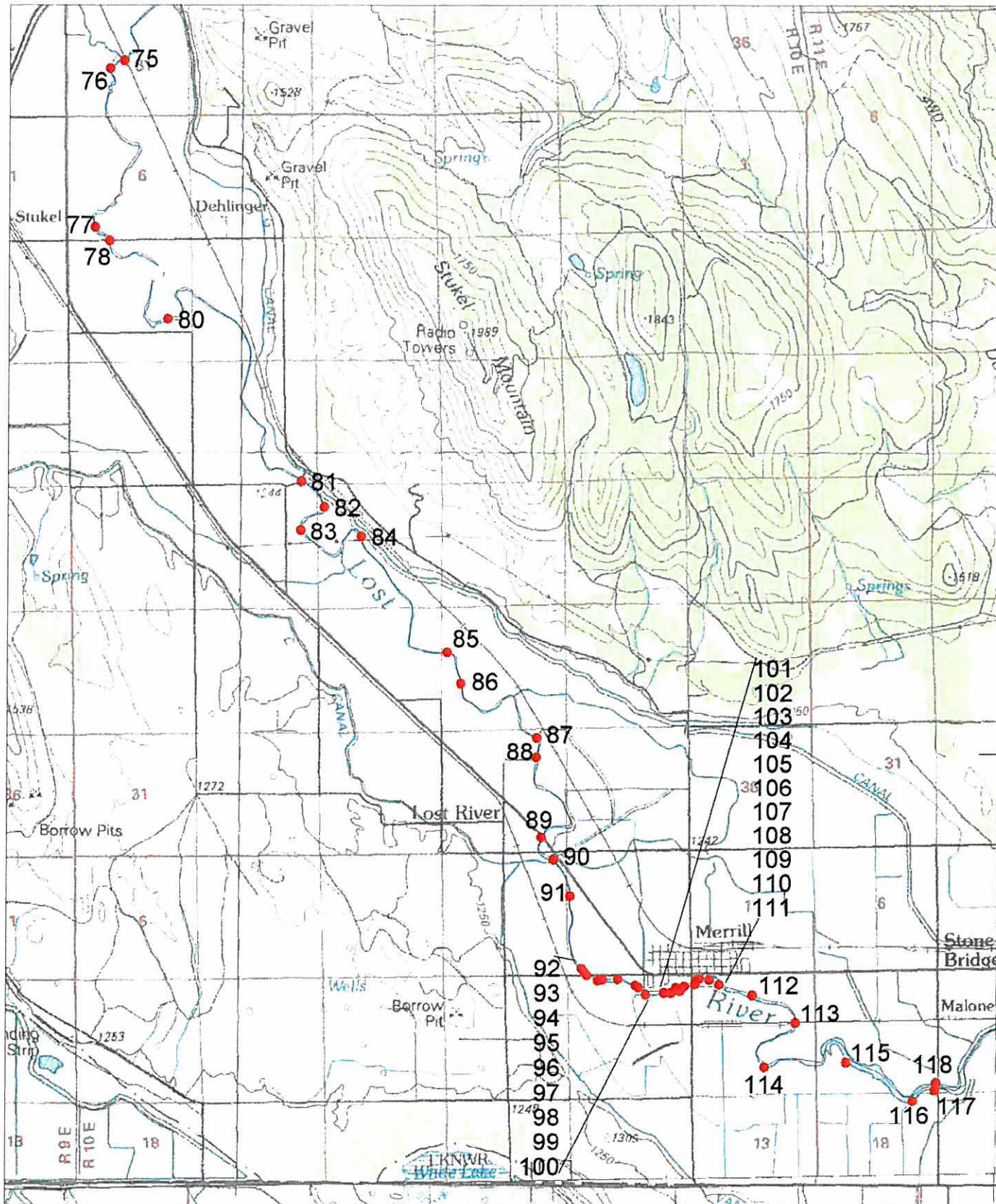
Projection: UTM Zone 10, NAD 27

Compiled By: B. Peck, USBR Klamath Project Area Office, 12/00



# Klamath Project Service Area Water Diversions

## Lost River between Anderson Rose Dam and Lost River Diversion Dam



0 1 2 Miles

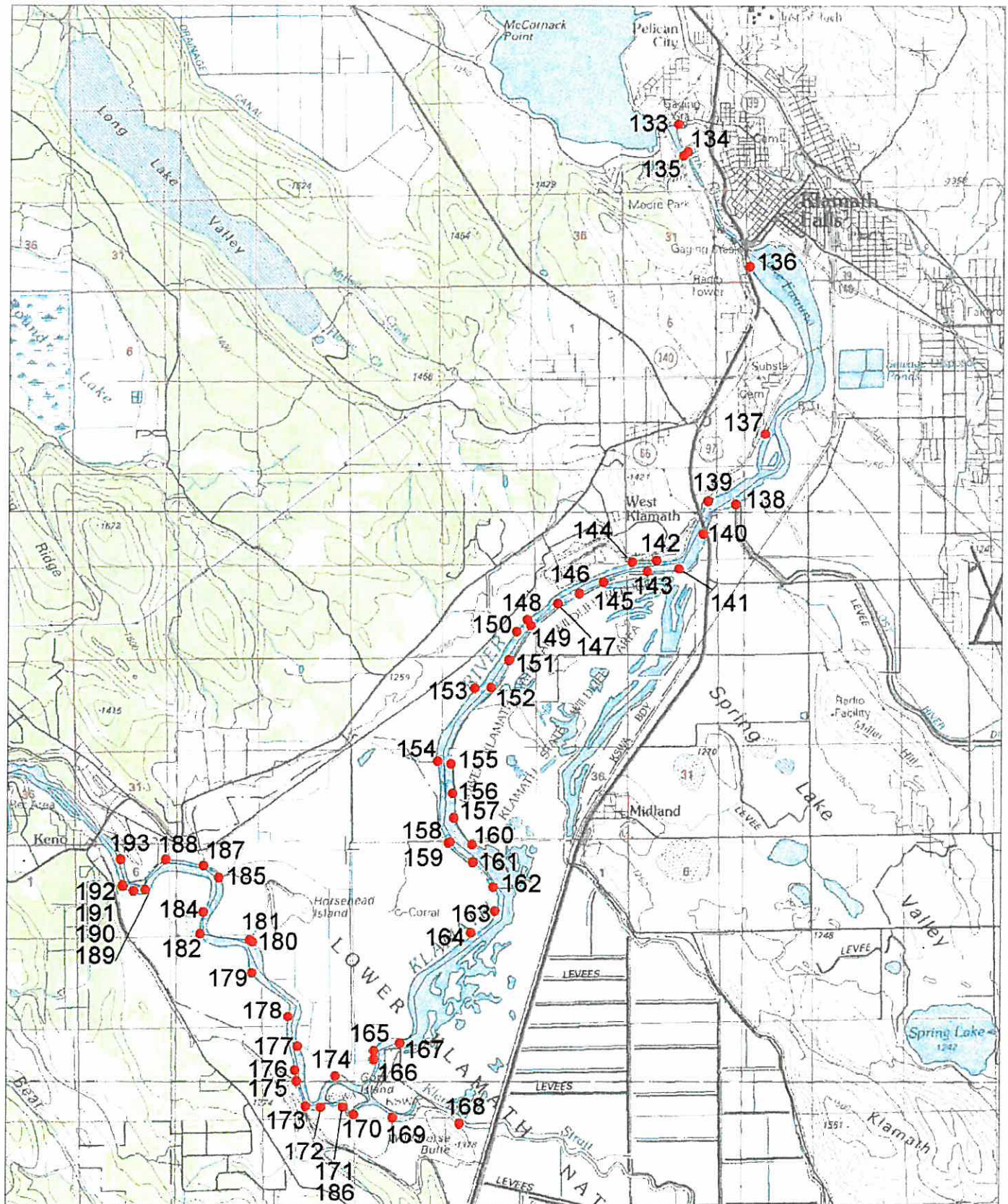


Backdrop: USGS 1:100K Digital Raster Graphic  
 Projection: UTM Zone 10, NAD 27  
 Compiled By: B. Peck, USBR Klamath Project Area Office, 12/00



# Klamath Project Service Area Water Diversions

## Klamath River



0 1 2 3 Miles



Backdrop: USGS 1:100K Digital Raster Graphic  
 Projection: UTM Zone 10, NAD 27  
 Compiled By: B. Peck, USBR Klamath Project Area Office, 12/00